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#### UNITED STATES PATENT AND TRADEMARK OFFICE



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# BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/530,158

Filing Date: April 01, 2005 Appellant(s): HARR, JOAKIM **MAILED** 

JAN 0 9 2008

**GROUP 3600** 

Mark P. Stone For Appellant

**EXAMINER'S ANSWER** 

This is in response to the appeal brief filed 10/22/2007 appealing from the Office action mailed 05/25/2007.

### (1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

## (2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

## (3) Status of Claims

The statement of the status of claims contained in the brief is correct.

## (4) Status of Amendments After Final

No amendment after final has been filed.

## (5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

## (6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

#### (7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

#### (8) Evidence Relied Upon

WO 00/53522

Harr, Joakim

9-2000

### (9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-20 are rejected under 35 U.S.C. 102(b) as being unpatentable over Harr (WO 00/53522).

Regarding [claim 1], a swing damping (see fig. 1, element 1) arrangement, particularly an arrangement (see figs. 1, 2, and 5) pertaining to a swing damper (see fig. 1, element 1) for supporting a tool (see fig. 1, element 5) that hangs from a crane arm (see fig. 1, element 2). Wherein the damper (see fig. 1, element 1) includes an upper part (see fig. 1, element 11) connected to the crane arm (see fig. 1, element 2), and a lower part (see fig. 1, element 12) which supports a working implement (see fig 1), either directly or via a rotator (see fig. 1, element 4) for instance, wherein the upper part (see fig. 1, element 11) and the lower part (see fig. 1, element 12) are pivotally connected to each other via a pivot joint (see fig. 1, element 13), and wherein the damper (see fig. 1, element 1) includes a brake arrangement (see fig. 2, element 50), characterized in that the brake arrangement (see fig. 2, element 50) includes a brake unit (see fig. 5, element 70) having discs (see fig. 5, elements 90 and 91) that can swing

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around the pivot axle (see fig. 5, element 14; also see page 3, lines 30-35) of the pivot joint (see fig. 1, element 13), in that at least one of the discs (see fig. 5, elements 90 and 91) is secured against rotation relative to the upper part (see fig. 1, element 11), in that at least of the discs (see fig. 5, elements 90 and 91) is scoured against rotation relative to lower part (see fig. 1, element 12), in that the arrangement (see figs. 1, 2, and 5) includes a tensioning element (see fig. 4, elements 76 and 78) which functions to press the discs (see fig. 5, elements 90 and 91) together in a braking operation, and in that the tensioning element (see fig. 4, elements 76 and 78) is located at least partially within one or two pivot bearings (see fig. 2, element 13) located between the upper part (see fig. 1, element 11) and the lower part (see fig. 1, element 12); [claim 2] an arrangement (see figs. 1, 2, and 5) characterized in that the brake unit (see fig. 5, element 70) is situated in a space (see figs. 4 and 5) between two pivot bearings (see. fig. 2, element 13) located between the upper part (see fig. 1, element 11) and the lower part (see fig. 1, element 12); [claims:3 and 9] an arrangement (see figs. 1, 2, and 5) characterized in that the upper part (see fig. 1, element 11) includes an abutment surface (see figs. 2 and 4, element 17) for driving at least one disc (see fig. 5, elements 90 and 91); [claims 4, 10 and 11] an arrangement (see figs. 1, 2, and 5) characterized in that the lower part (see fig. 1, element 12) includes all abutment surface (see figs. 2 and4, element 17) for driving at least one disc (see fig. 5, elements 90 and 91); [claims 5, 12-14] an arrangement (see figs. 1, 2, and 5) characterized in that at least one disc (see fig. 5, elements 90 and 91) has brake lining (see fig. 5, element 72) on at least one side thereof; [claims 6, 15-18] an arrangement (see figs. 1, 2, and 5) characterized in

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that discs (see fig. 5, elements 90 and 91) include a through-passing hole (see fig. 3, element 63) for the tensioning element (see fig. 4, elements 76 and 78); **[claims 7, 19]** and 20] an arrangement (see figs. 1, 2, and 5) characterized in that the force (see figs 4 and 5, elements 73 and 73' respectively) generated by the tensioning element (see fig. 4, elements 76 and 78) in order to press the discs (see fig. 5, elements 90 and 91) together is based on a spring force (see figs 4 and 5, elements 73 and 73' respectively) and/or on the application of a pressure medium (see page 6, lines 26-28).

Regarding [claim 8], Harr (522) discloses a method (see page 9, lines 13-35) relating to a swing damper (see fig. 1, element 1), particularly to a swing damper (see fig. 1, element 1) for carrying a tool (see fig. 1, element 5) that hangs from a crane arm (see fig. 1, element 2), wherein the swing damper (see fig. 1, element 1) includes an upper part (see fig. 1, element 11) which is connected to the crane arm (see fig. 1, element 2), and a lower part (see fig. 1, element 12) which carries a working implement (see fig. 1), either directly or via a rotator (see fig. 1, element 4) for instance, wherein the upper part (see fig. 1, element 11) and the lower part (see fig. 1, element 12) are pivotally connected together via a pivot joint (see fig. 1, element 13), and wherein the swing damper (see fig. 1, element 1) includes a brake arrangement (see fig. 2, element 50), characterized in that swinging movement is braked by virtue of upper part (see fig. 1, element 11) being caused to entrain at least one disc (see fig. 5, elements 90 and 91) of a brake unit (see fig. 5, element 70) as part swings, and by virtue of the lower part (see fig. 1, element 12) being caused to entrain at least one disc (see fig. 5, elements 90 and 91) of the brake unit (see fig. 5, element 70) as lower part (see fig. 1, element

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12) swings, and in that the disc (see fig. 5, elements 90 and 91) are pressed together by a tensioning element (see fig. 4, elements 76 and 78) in a braking operation where the tensioning element (see fig. 4, elements 76 and 78) is located at least partially within one or two pivot bearings (see fig. 2, element 13) located between the upper part (see fig. 1, element 11) and the lower part (see fig. 1, element 12).

#### (10) Response to Argument

## a. Rejection of Claims 1 and 8 as being anticipated by the Harr publication:

Independent claim 1 is directed to a swing damping arrangement, while independent claim 8 is directed to a method relating to a swing damper.

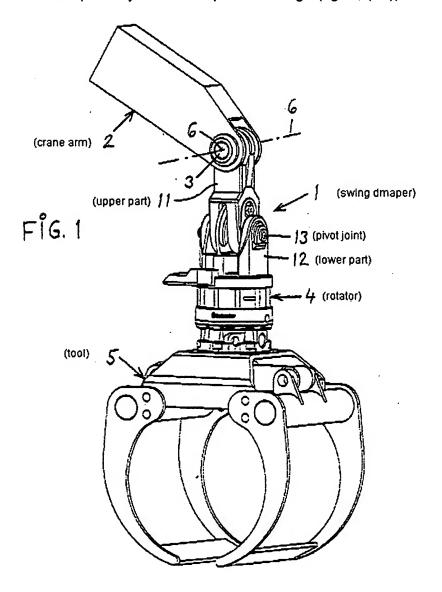
Claims 1 and 8 recite a swing damping arrangement pertaining to a swing damper. As seen in Figs. 1-4 of Appellant's disclosure, the swing damper (fig. 1, (1)) supporting a tool (fig. 1, (5)) or working implement that hangs from a crane arm (fig. 1, (2)), wherein the damper (fig. 1, (1)) includes an upper part (figs. 1 and 2, (11)) connected to the crane arm (fig. 1, (2)), and a lower part (figs 1 and 2, (12)) which supports the tool (fig. 1, (5)) either directly or via a rotator (figs. 1 and 2, (4)), wherein the upper part (figs. 1 and 2, (11)) and the lower part (figs 1 and 2, (12)) are pivotally connected to each other via a pivot joint (figs. 1 and 3, (13)), and wherein the damper (fig. 1, (1)) includes a brake arrangement (figs. 1 and 2, (50)) which includes a brake unit (figs 2 and 4, (60)) having discs (figs. 2 and 4, (70) and (80)) that can swing around a pivot axle (figs. 2-4, (14)) of the pivot joint (figs. 1, 3, and 4, (13)) and the disc (figs. 2 and 4, (70)) is secured against rotation relative to the upper part (fig. 4, (11)) and the

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disc (figs. 2 and 4, (80)) are secured against rotation relative to the lower part (fig. 4, (12)), the arrangement (figs. 2 and 4, (50)) further includes a tensioning element (figs. 2 and 4, (90)) which functions (by tightening screws (figs. 4 and 5, (98) and (99)) whose heads act to compress the spring pack (figs. 4 and 5, (93) and (94)) to press the discs (figs. 2 and 4, (70) and (80)) together in a braking operation and is located at least partially within the pivot bearings (fig. 4, (46)).

As seen in Figs. 1-5 of International Application Published Under The Patent Cooperation Treaty (PCT) WO 00/53522, Harr discloses an arrangement relating to a swing damper (fig. 1, (1)) supporting a tool (fig. 1, (5)) that hangs from a crane arm (fig. 1, (2)), wherein the damper (fig. 1, (1)) includes an upper part (figs. 1 and 2, (11)) connected to the crane arm (fig. 1, (2)), and a lower part (figs 1 and 2, (12)) which supports the tool (fig. 1, (5)) either directly or via a rotator (fig. 1, (4)), wherein the upper part (figs. 1 and 2, (11)) and the lower part (figs 1 and 2, (12)) are pivotally connected to each other via a pivot joint (fig. 1, (13)), and wherein the damper (fig. 1, (1)) includes a brake arrangement (figs. 2 and 4, (50)) which includes a brake unit (figs. 2-5, (60)) having discs (fig. 5, (90) and (91)) that can swing around a pivot axle (figs. 2-4, (14)) of the pivot joint (figs. 1, 3, and 4, (13)) and the disc (fig. 5, (90)) is secured against rotation relative to the upper part (fig. 5, (11)) and the disc (fig. 5, (91)) are secured against rotation relative to the lower part (fig. 5, (12)), the arrangement (figs. 2-5, (50)) further includes a tensioning element (figs. 4 and 5, (70) and (71)) which functions (according to page 5, line 21 to page 6, line 19 of the International Application Published Under The Patent Cooperation Treaty (PCT) WO 00/53522, by tightening screw (can be

seen in figs. 4 and 5, (71)) whose head act to compress the spring pack (figs. 4 and 5, (73))) to press the discs (fig. 5, (90) and (91)) together in a braking operation and is located at least partially within the pivot bearings (fig. 5, (13)).



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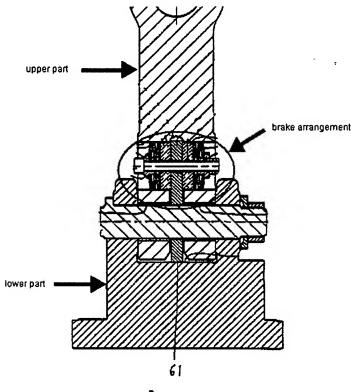


Fig. 4

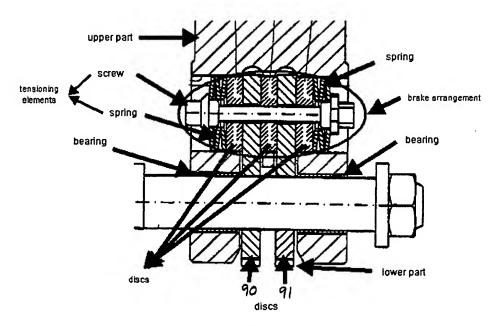


Fig.5

Appellant argues that both the claimed arrangement and method of the applied Harr (WO 00/53522) include structure, structural arrangement, and operational steps which are significantly different from the swing damping arrangement and method relating to a swing damper, as defined by appealed Claims 1 and 8. The examiner disagrees because Harr (WO 00/53522) clearly discloses all the claimed limitations (please see the figures above and the abstract of Harr (WO 00/53522)). Furthermore, it is important to note that there is no support or statement disclosed by Appellant how the damping arrangement of Harr (WO 00/53522) is different than the claimed damping arrangement of appealed Claims 1 and 8. Appellant argues that Harr (WO 00/53522) includes a brake disc (fig. 4, (60)) having a slot (4). The examiner notes that appealed independent Claims 1 and 8, respectively, do not employ any physical structure of the discs therefore the discs of Harr (WO 00/53522) clearly reads on the discs as claimed. Appellant further argues that the method steps relating to the swing damper of Harr (WO 00/53522) are different than the method steps in the appealed Claim 8. The examiner disagrees because the method steps relating to the swing damper of Harr (WO 00/53522) clearly read on the appealed Claim 8 and the examiner respectfully submits that the braking function of the swing damper according to page 5, line 21 to page 6, line 19 of Harr (WO 00/53522), operates by tightening screw (can be seen in figs. 4 and 5, (71)) whose head act to compress the spring pack (figs. 4 and 5, (73))) to press the discs (fig. 5, (90) and (91)), which clearly reads on the disclosed brake function of the swing damper of the appealed Claim 8.

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## (11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

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